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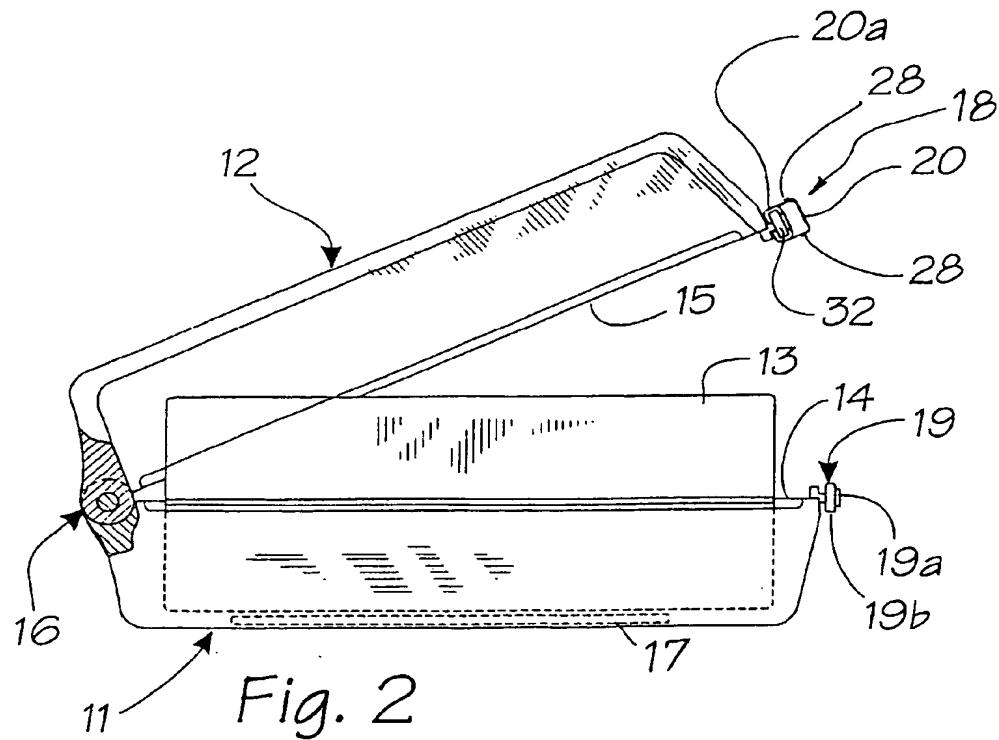
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(54) Anti-theft container for commercial articles packaged in blisters

(57) An anti-theft container, comprising two half-shell components (11, 12) between which a blister-packaged article (13) to be protected is enclosed, the components being articulated one another by means of at least one hinge (16) that can be accessed only from the

inside. The first component (11) has an enclosure (17) that contains an excitable signaling component and an engagement means in which it is possible to insert and lock one end of a tab (19) that protrudes from the second component (12).



EP 1 285 610 A2

Description

[0001] The present invention relates to an anti-theft container for commercial articles.

[0002] The container is adapted particularly but not exclusively for products packaged in blisters (perfumes, cosmetics, etcetera).

[0003] As is known, currently there is an increasingly widespread use of anti-theft devices provided with a component adapted to be detected if immersed in an electromagnetic field usually generated in the presence of a guided exit of the shop or establishment in which the anti-theft devices are used.

[0004] These devices are coupled to the object to be protected against theft and are separated from it by breaking or removal by means of special equipment, usually when the object is regularly purchased.

[0005] Devices are known which are characterized in that they comprise a strap that is suitable to close like a noose around an application portion of the object to be protected against theft.

[0006] The strap has a container for a device that is excitable and therefore detectable in the presence of electromagnetic fields.

[0007] These devices are inherently unsuitable to protect items such as those mentioned above, which have no region that can be surrounded in a noose-like fashion.

[0008] The aim of the present invention is to provide an anti-theft container that is structurally capable of being applied to protect items packaged in blisters or the like.

[0009] Within this aim, an object of the invention is to provide an anti-theft container that can be disengaged from the blister to which it is applied without having to break it.

[0010] Another object is to provide an anti-theft container that still allows to view the blister and therefore the item packaged therein.

[0011] Another object is to provide an anti-theft container that can be marketed at competitive prices.

[0012] This aim and these and other objects that will become better apparent hereinafter are achieved by an anti-theft container, characterized in that it comprises two half-shell components between which the blister to be protected is enclosed, said components being articulated one another by means of at least one hinge that can be accessed only from the inside, one of said components having an engagement means in which a tab that protrudes from the other one of said components is insertable and lockable, an enclosure that contains an excitable signalling component being arranged in the region inside the two components.

[0013] Advantageously, a slit for the passage of the plate-like support of the blister is provided between the components.

[0014] Further characteristics and advantages of the present invention will become better apparent from the

following detailed description of a preferred but not exclusive embodiment of the anti-theft container, illustrated by way of non-limitative example in the accompanying drawings, wherein:

5 Figure 1 is a perspective view of an anti-theft container according to the invention, during use;
10 Figure 2 is a side view of the container of Figure 1 when open;
15 Figures 3 and 4 are respectively a plan view and a further side view of the container of Figure 1;
20 Figure 5 is an exploded view of the anti-theft components of the container;
25 Figure 6 is a sectional view of the components of Figure 5 in the configuration for use.

[0015] With reference to the figures, an anti-theft container according to the invention is generally designated by the reference numeral 10 and comprises two half-shell components, respectively a first one 11 and a second one 12, between which a blister 13 to be protected is enclosed.

[0016] The two components 11 and 12 are in this case both tray-shaped, at least one of them is conveniently made of clear plastic material to avoid hiding the blister 13, and the components are articulated one another, at two corresponding complementary edges 14 and 15 suitable to mate, by means of at least one hinge 16 that can be accessed only from the inside.

[0017] The first component 11 is internally provided with an enclosure 17 that contains an excitable electronic signalling component, which is known per se and commercially available, and is not shown in the figures.

[0018] The second component 12 is provided externally, on the opposite side with respect to said hinge 16, adjacent to the edge 14, with a slider-like engagement means 18 for the insertion and locking of a tab 19 that protrudes correspondingly from the edge 15 of the second component 12.

[0019] The tab 19, which is rigidly coupled to the first component 11, lies longitudinally parallel to the edge 14, has a T-shaped transverse cross-section, and has, at the top, a rack 19a with teeth having a triangular cross-section.

[0020] The device 10 is fastened by coupling the tab 19 to the engagement means 18.

[0021] The engagement means 18 is constituted by a box-like slider 20, which can slide on a guide 32 that is parallel and rigidly coupled to the edge of the second component 12 thanks to a C-shaped portion 20a that engages the T-shaped portion 19b of the tab 19.

[0022] An element 21 cooperates with the slider 20, can be inserted therein and is provided with an elastic central tongue 22 that is monolithic with respect to a base 23 provided with parallel and mutually opposite elastic wings 24, each of which has, at its end, an engagement tooth 25 that is directed outwardly and is designed to be inserted stably, upon assembly, within a

corresponding through hole 26 provided in a corresponding wall of the box-like slider 20; the angle of the tongue 22 being perpendicular to the angle of the wings 24.

[0023] The element 21 also has, at the tongue 22, a rack-shaped portion 27 that is suitable to couple to the rack 19a of the tab 19, to which it is shaped complementarily.

[0024] The guide 32 has the same transverse cross-section profile as the tab 19.

[0025] Such tab is therefore shaped complementarily to the guide 32 and is suitable to lie after it, allowing the sliding of the slider 20 until it straddles the guide 32 and the tab 19 and it mutually engages the racks with a permanent locking effect.

[0026] The tab 19 can be released only by using dedicated pliers, not shown in the figure.

[0027] Such pliers are positioned correctly by means of mutually opposite pins 28, which are provided externally on the box-like slider 20 and, by means of a tab thereof, acts so as to flex the tongue 22, moving it away from the tab 19 and disengaging the teeth of the racks. [0028] Advantageously, a slit 29 is provided, between the edges 14 and 15 of the components 11 and 12, for the passage of the plate-like support 30 of the blister 13, when provided (such support, provided for example with a hole 31, allows to hang the assembly for display).

[0029] In practice, when one wishes to protect against theft a blister 13 with the container 10, the blister 13 is inserted between the components 11 and 12 and the tab 19 is arranged so as to continue the guide 32 in order to mate with the element 21 in the slider 20 of the engagement means 18.

[0030] The coupling between the sets of teeth prevents the opening of the container 10 and therefore prevents the disengagement of the signaling device provided in the enclosure 17.

[0031] Any transit of the blister through the electronically monitored entrance of the commercial establishment causes the activation of the alarm signal.

[0032] When a sale is made, the blister can be freed by the retailer by means of the pliers and the buyer can therefore pass with it through the electronically monitored access without causing the activation of the alarm.

[0033] It has been observed that the present invention has achieved the intended aim and objects.

[0034] The most evident particularity is the possibility to apply the anti-theft device to a plurality of different blisters that can be contained between its half-shell components.

[0035] Attention is drawn to the structural simplicity of the device according to the invention, which can be mass-produced effectively and marketed at particularly competitive prices.

[0036] It is also observed that the device according to the invention does not penalize at all the buyer's possibility to evaluate the object contained in the blister and to handle it.

[0037] The materials, so long as they are compatible with the contingent use, as well as the dimensions, may be any according to requirements.

[0038] The disclosures in Italian Utility Model Application No. PD2001U000063 from which this application claims priority are incorporated herein by reference.

[0039] Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly, such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

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Claims

1. An anti-theft container, **characterized in that** it comprises two half-shell components between which the blister to be protected is enclosed, said components being articulated one another by means of at least one hinge that can be accessed only from the inside, one of said components having an engagement means in which a tab that protrudes from the other one of said components is insertable and lockable, an enclosure that contains an excitable signaling component being arranged in the region inside the two components.
2. The anti-theft container according to claim 1, **characterized in that** between said two half-shell components a slit is provided for the passage of a plate-like support of the blister.
3. The anti-theft container according to claim 1, **characterized in that** each one of said two components is tray-shaped, at least one being made of clear plastic material to avoid hiding the blister from view, said components being articulated one another at two corresponding complementary edges that are suitable to mate.
4. The anti-theft container according to claim 1, **characterized in that** said tab, rigidly coupled to a component, lies longitudinally parallel to the edge, has a T-shaped transverse cross-section, and has, at the top, a rack with teeth that have a triangular cross-section.
5. The anti-theft container according to claim 1, **characterized in that** said engagement means is constituted by a box-like slider that is arranged opposite said hinge and can slide on a guide that is rigidly coupled to the other component of said container, and by an element that can be inserted therein and is provided with a central elastic tongue that is monolithic with respect to a base provided with elastic wings that are parallel and opposite one another,

each wing having, at its ends, an engagement tooth that is directed outwardly and is designed to be inserted stably upon assembly within a corresponding through hole provided in a corresponding wall of the box-like slider, the direction of the angle of said tongue being perpendicular to the direction of the angle of said wings.

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6. The container according to one or more of the preceding claims, **characterized in that** said box-like slider slides on said guide, which is rigidly coupled and parallel to the edge of said first component thanks to a C-shaped part that engages said guide and has a T-shaped transverse cross-section, said tab, which has the same profile as said guide, being suitable to be arranged after it, allowing the sliding of said slider until it straddles said guide and said tab and mutually engages said racks with a permanent locking effect.

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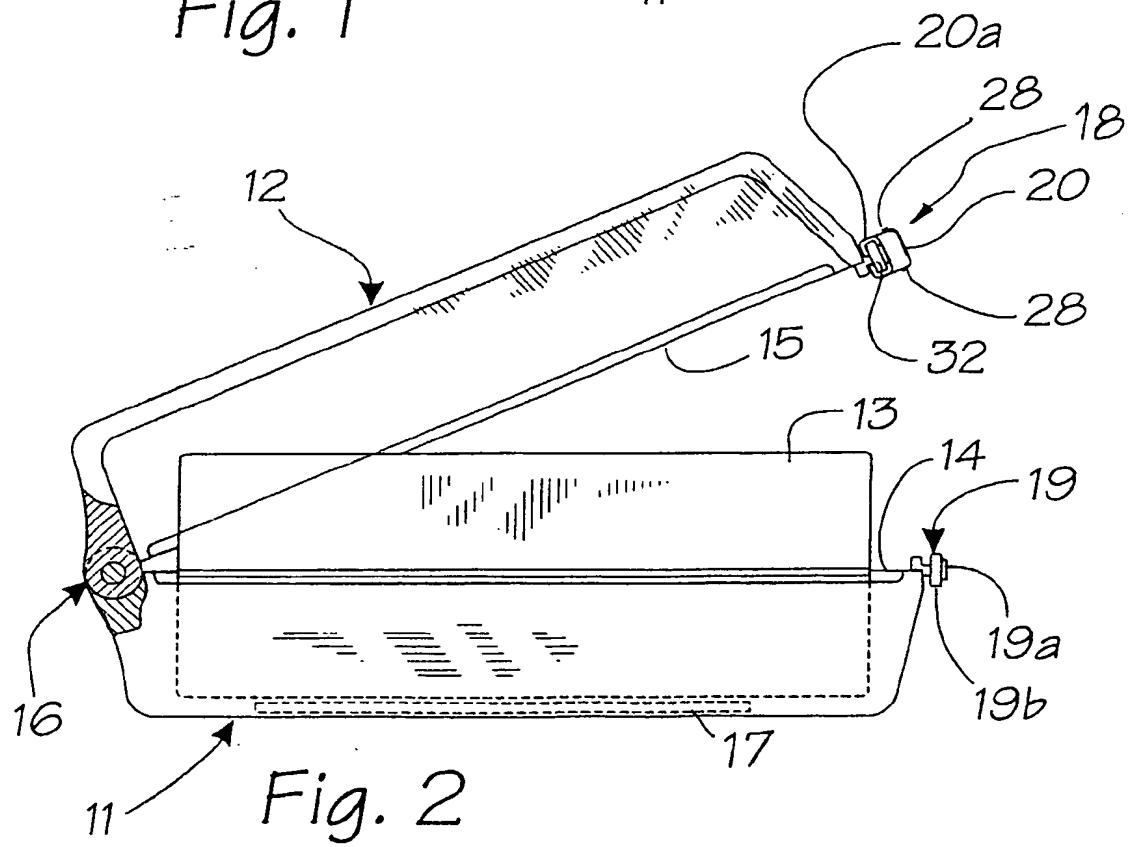
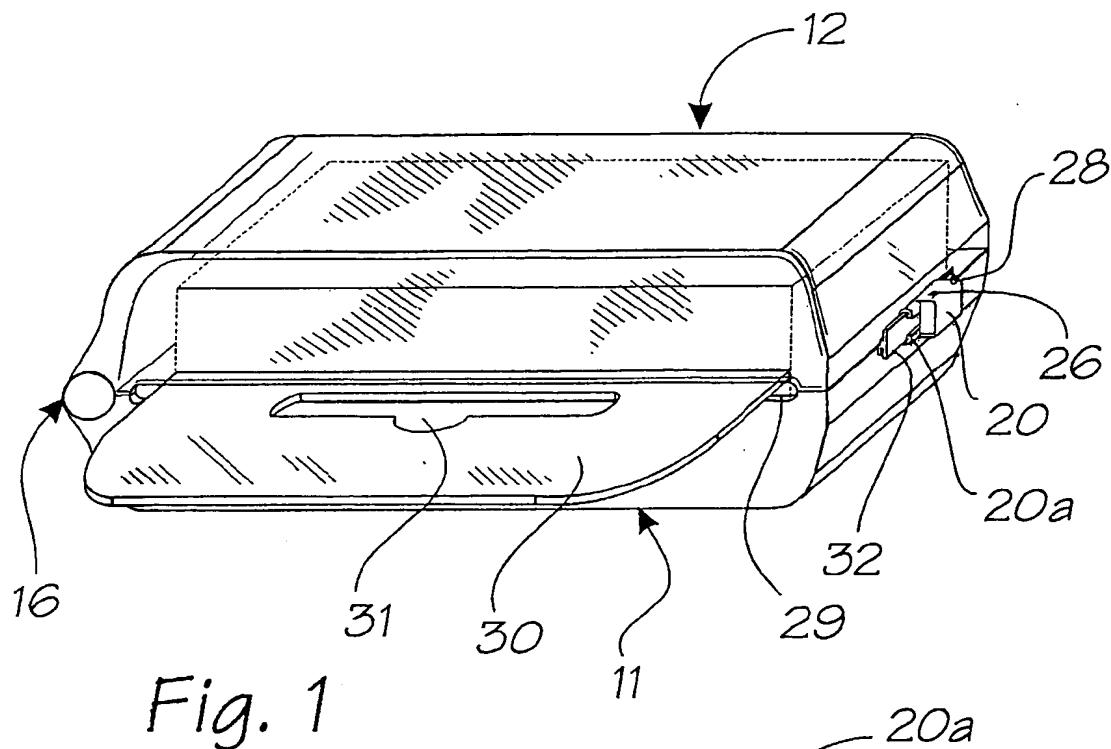
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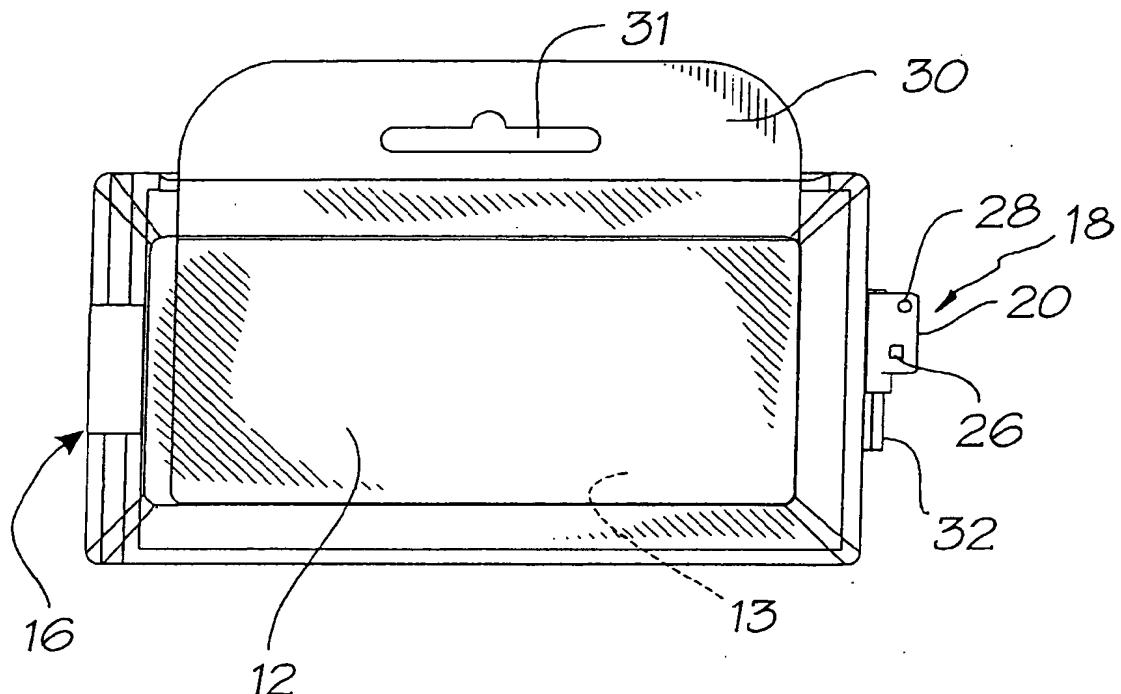


Fig. 3

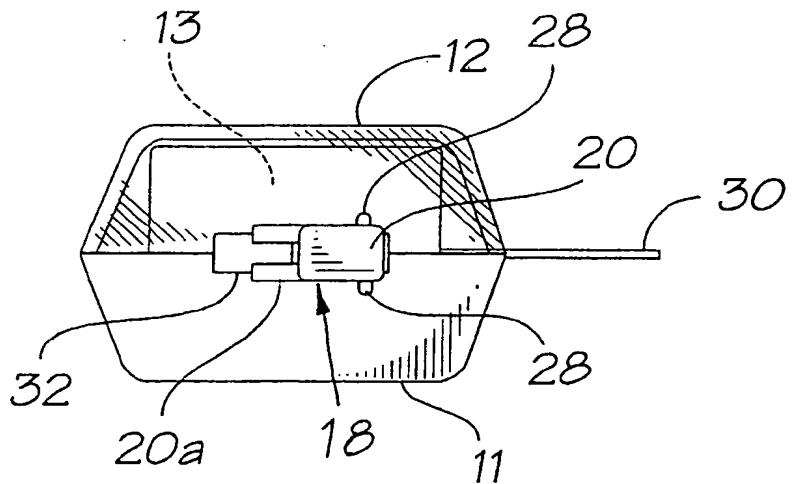


Fig. 4

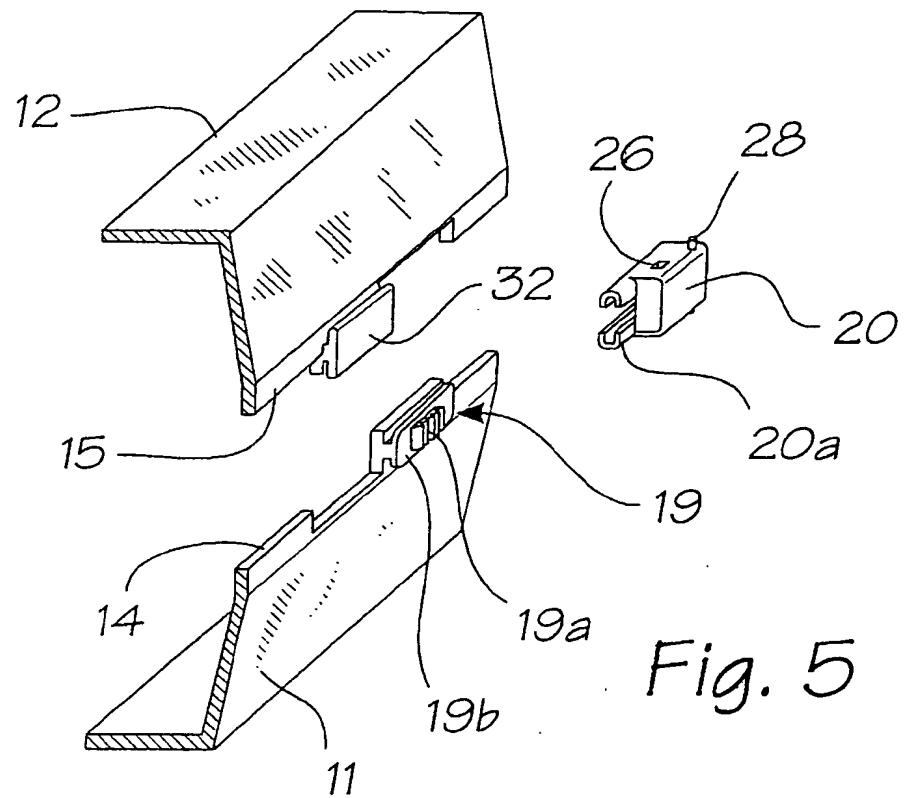


Fig. 5

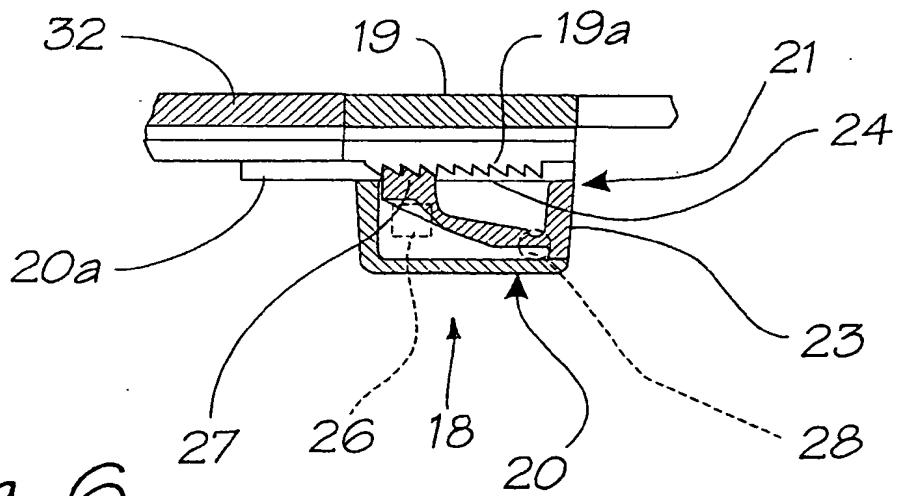


Fig. 6

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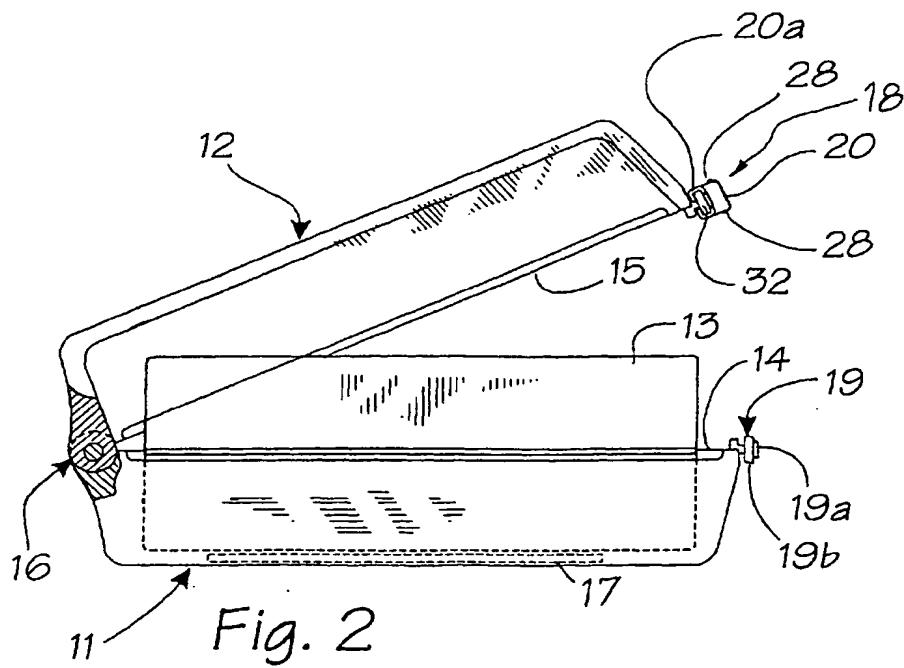
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EP 1 285 610 A3



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EUROPEAN SEARCH REPORT

Application Number
EP 02 01 5503

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Y	US 4 005 800 A (SCHURMAN PETER T) 1 February 1977 (1977-02-01) * the whole document *	1-3	A47F5/08 E05B73/00 B65D43/16
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			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			E05B B65D A47F
<p>The present search report has been drawn up for all claims</p>			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	14 May 2003	Neillier, F	
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background D : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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ON EUROPEAN PATENT APPLICATION NO.

EP 02 01 5503

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